Chapter 3. PILOT BRIEFING

Section 1. GENERAL

3-1-1. DEFINITION

Pilot weather briefings are defined as "The translation of weather observations and forecasts, including surface, upper air, radar, satellite, and pilot reports into a form directly usable by the pilot or flight supervisory personnel to formulate plans and make decisions for the safe and efficient operation of aircraft." These briefings shall also include information on NOTAM's, flow control, and other items as requested.

3-1-2. PREDUTY REQUIREMENTS

Before assuming pilot briefing duties, familiarize yourself sufficiently with aeronautical and meteorological conditions to effectively provide briefing service. This includes:

a. General locations of weather causing systems and general weather conditions for the entire contiguous United States and/or other briefing areas, as appropriate; e.g., Alaska, Hawaii, Mexico, Canada, Puerto Rico.

b. Detailed information of current and forecast weather conditions for the geographical area deemed significant by the facility air traffic manager.

c. Other pertinent items; e.g., NOTAM's, MTR/MOA activity.

REFERENCE-
Accomplish this in accordance with Para 1-3-3 and pertinent facility directives.

3-1-3. PREFLIGHT BRIEFING DISPLAY

Provide a preflight briefing display for specialist/pilot use. The contents and method of display shall be based on individual facility requirements; e.g., available equipment, space. Additional displays, as required, shall be provided to ensure availability of information at all inflight and preflight positions. At the discretion of facility management, provide a separate display for pilot use. All material in such displays shall be kept updated.

REFERENCE-
Enhance facsimile charts in accordance with Para 3-1-4.

3-1-4. WEATHER DISPLAY PRODUCTS

a. The weather graphic display should include, but not necessarily be limited to, the following analysis, prognosis, and data products:

1. Weather Depiction.
2. Surface Analysis.
3. Forecast Winds Aloft.
4. Current Winds Aloft.
5. National Radar Summary.
6. 850 MB.
7. 700 MB.
8. 500 MB.
9. 300 MB.
10. 200 MB.
11. Composite Moisture Stability Chart (Lifted Index, Precipitable Water, Freezing Level-Mean Relative Humidity).
12. 12- and 24-hour low level significant weather prognosis.
13. High level significant weather prognosis.
14. 36- and 48-hour surface prognosis.

NOTE-
Because of presentation limitations and techniques, some interim system products may not take on the same appearance as conventional facsimile products. During the transition into a national graphic weather display system (GWDS) program, some flexibility of product display, format, and content may be authorized.

b. The utility of charts is greatly enhanced by coloring and shading. Use the symbols and colors shown in subparas 3d and e, on all weather chart displays. Facsimile products used for closed circuit television (CCTV) may be highlighted to accentuate the displays. In addition, to allow for the greatest contrast between shaded areas and symbology, different colors may be required to enhance color weather graphic systems.

c. Map features. (See FIG 3-1-1.)

d. Precipitation and obstruction to vision. (See FIG 3-1-2.)

MAP FEATURES CHART

TYPE	SYMBOL	COLOR
Cold front		Blue
Warm front		Red
Occluded front		Purple
Stationary front		Red and blue
Instability line		Purple
Convergence line		Green
Trough		Brown
Ridge		Yellow
Low pressure center		Red
High pressure center		Blue
Jet streams		Black
Isotherms		Red
Isotachs		Yellow
Freezing level aloft	80- - - -80	Red
IFR conditions		Red
MVFR conditions		Blue
Line of echoes		Red
Overcast Clouds (36-48 hour Prog only)		Orange
Area of echoes		Green
Severe Weather area		Red
Turbulence areas		Red
Precipitation areas		Green
Icing symbols		Red
Turbulence symbols		Red

FIG 3-1-1

PRECIPITATION AND OBSTRUCTION TO VISION CHART

Type	Symbol	Color
Freezing precipitation		red
Snow		green
Rain		green
Drizzle		green
Thunderstorm		red
Fog		yellow
Haze		yellow
Smoke		black
Dust		brown

FIG 3-1-2

e. The facsimile products which cannot be displayed shall be retained for specialist/pilot use.

f. Interpret and summarize weather radar video displays and issue pertinent information on observed/reported weather areas.

1. Use all available radar data and PIREP's to determine intensity, tops, area of coverage, movement, etc.

REFERENCE-
Pilot/Controller Glossary, Radar Weather Echo Intensity Levels.

2. Identify data obtained from sources other than radar video display by source and time of observation.

3. To the extent possible, define area of coverage in relation to VOR's or airways for the route structure being flown. Airports or geographic points may be used to assist the pilot in relating coverage to route of flight or destination.

EXAMPLE-
"A broken line of weak to intense echoes covers an area along and three zero miles east of a line from the Crazy Woman V-O-R to the Riverton V-O-R. Average tops between two-six thousand and three-four thousand. This line is increasing in intensity. Movement has been from northwest to southeast at three zero knots. The line includes an intense echo one five miles in diameter on Victor Two Ninety-eight forty-eight miles southeast of the Worland V-O-R, tops four three thousand. There are no known echoes within three-zero nautical miles of Victor Eight-five or Victor Two Ninety-eight south at this time."

3-1-5. FORECASTS, WARNINGS, AND ADVISORIES

a. Use only weather forecasts, warnings, and advisories issued by an NWS office (including CWSU's), the U.S. military, foreign governments, or FAA owned or leased graphics systems.

b. Use the information in the Meteorological Impact Statement (MIS) for preduty briefings, background, and supplemental information only. The MIS is a traffic flow planning product and is not to be used as an integral part of a briefing presentation.

c. The OUTLOOK section of WST's includes meteorological discussion information. Extract pertinent forecast data concerning convective activity location, movement, and intensity for briefing purposes. Do not provide discussion type information unless requested by the pilot.

d. When an NWS forecast meets amendment criteria, request assistance from the appropriate NWS office.

3-1-6. UNAVAILABILITY OF DATA

Use all available means to obtain the data required to brief pilots to their destination. If a complete briefing cannot be provided due to circuit problems or missing data, inform the pilot of this fact. Brief to the extent possible. As appropriate, furnish the pilot with the telephone number of another AFSS/FSS, or advise the pilot of the time you expect the data to be available.

3-1-7. TYPE OF BRIEFING TO BE CONDUCTED

Provide the pilot with the type of briefing requested; i.e., standard, abbreviated, or outlook. When it is not clear initially which type briefing is desired, provide the first one or two items requested, and then ascertain if the pilot would like a standard briefing. If a standard briefing is requested, conduct the briefing in accordance with para 3-2-1. If the pilot does not desire a standard briefing, provide either an abbreviated briefing in accordance with para 3-2-2, or an outlook briefing, in accordance with para 3-2-3.

3-1-8. RECORDING PILOT BRIEFINGS

a. FSS. Use FAA Forms 7233-1, 7233-2, 7233-5, and 7230-21 for recording pilot briefings. Document the briefing by one of the following methods:

1. FAA Form 7233-2. Use a separate form each day. Two or more forms may be used simultaneously at different operating positions. Complete boxes 1 through 3 on each form. Enter appropriate data in columns 4, 5, 6, 7, 8 (if pertinent), and 9. The pilot's name may be substituted for the aircraft identification if unknown. As applicable, enter OTLK (outlook briefing), AB (abbreviated briefing), and/or VNR in column 8.

2. FAA Form 7233-1. Check the "pilot briefing" block, fill in specialist initials, and time started. As applicable, also enter AB, OTLK, and/or check the VNR block.

3. FAA Forms 7233-5/7230-21. Enter PB in block 14 if a briefing is provided. As applicable, also enter AB, OTLK, and/or VNR in the same block.

b. M1. Pilot briefings are logged and stored on the DD file for accountability. The required elements are: PB (DESTINATION), (ACID), REMARKS.

NOTE-
If current partial exists for the proposed flight, DESTINATION and ACID are optional.

EXAMPLE-

PB	*Preflight Briefing logged using current partial.*
PB DSM	*Preflight Briefing logged bypassing destination in current partial.*
PB ,,VNR	*Preflight Briefing logged using current partial, with remarks added.*
PB DSM,, VNR	*Preflight Briefing logged bypassing destination in current partial, with remarks added.*
PB DSM,N1,VNR	*Preflight Briefing logged bypassing destination and ACID in current partial, with remarks added.*

c. Where recorders are used, facility management may limit entries on pilot briefing records to those required for facility use.

d. Where fast-file recorders are used and the pilot states the source of a briefing on the recorder, it shall be entered in the remarks field of the flight plan.

EXAMPLE-
PB/DCA PB/DUATS